

# The MINERvA Operations Report

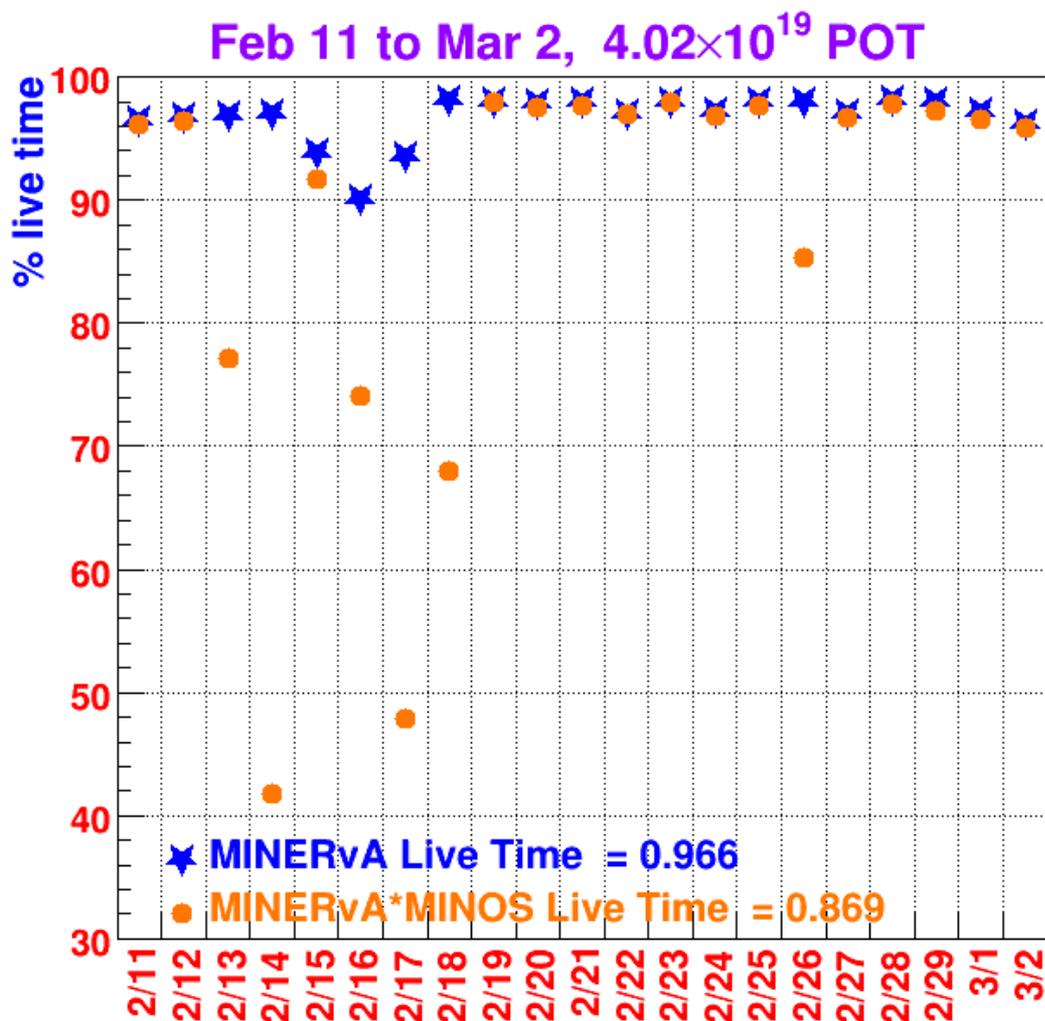
## All Experimenters Meeting

Howard Budd, University of Rochester

Mar 7, 2016



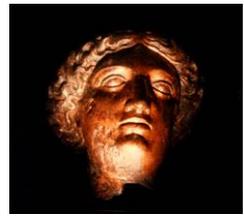
# $\nu$ Data



- Live Time – Feb 11-Mar 2, 2016
- $4.02 \times 10^{19}$  POT
- MINERvA 96.6%
- MINERvA\*MINOS 86.9%



## v Data



- We do not understand the lower efficiencies for the days listed below. Uptime claims we were taking data & were not getting errors. We will continue investigating why the efficiencies are lower.
  - Feb 13 – 96.8%
  - Feb 15 – 93.8%
  - Feb 16 – 90.0%
  - Feb 17 – 93.4%



# v Data



- At the start of a run the DAQ would sometimes give a “Slowcontrol” error while trying to read the HV. Often manual intervention was needed to get the DAQ running. Examples:
  - Feb 12 – 96.8 % live
  - Feb 11 – 96.4% live
  - Other days we would lose ~1% of the data
- This error is similar to some errors we got during the Jan 13 power outage. We tried to read the HV using Slowcontrol while receiving beam triggers and got errors. In this case, the beam triggers interfered with the Slowcontrol commands. We learned to just ignore these errors.
  - Slowcontrol is our stand alone program written by Cristian Gingu of PPD to look at the MINERvA hardware and to download constants.



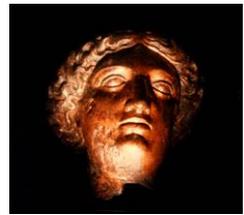
## v Data



- During the power outage that occurred on Jan 13, we replaced some hardware in order to get the system working. We replaced the 2 CRIMS (The module distributes the timing signals) in crate 0. The CRIM didn't resolve problem we were having. After getting the DAQ running, we did not put the original CRIMs back in.
- We speculated that the new CRIMS in Crate 0 were creating these errors. On Mar 1 we replaced the 2 CRIMs with the original CRIMS. The error has not occurred since then.



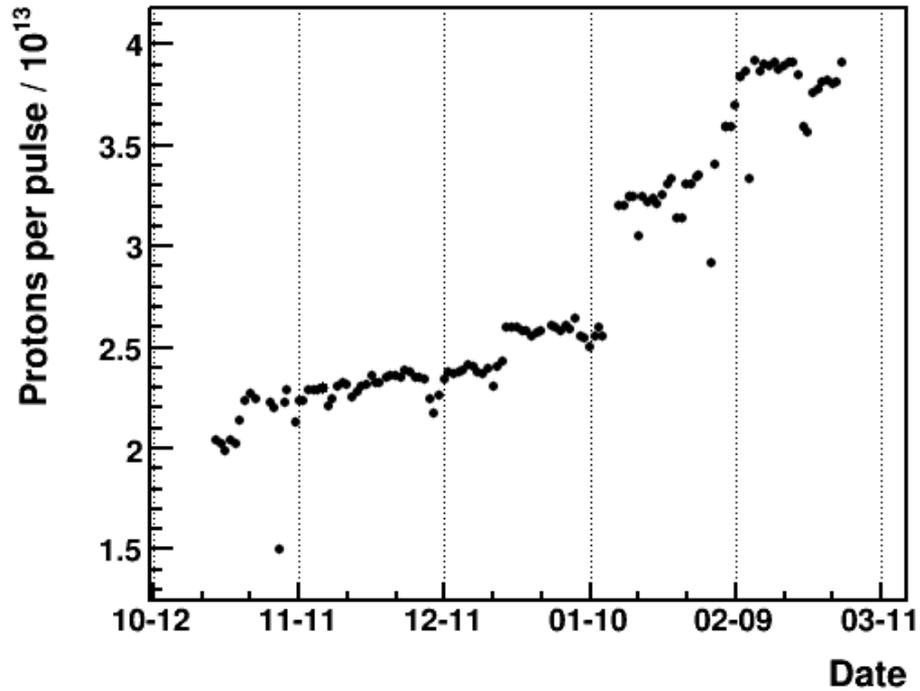
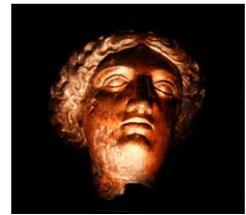
## v Data



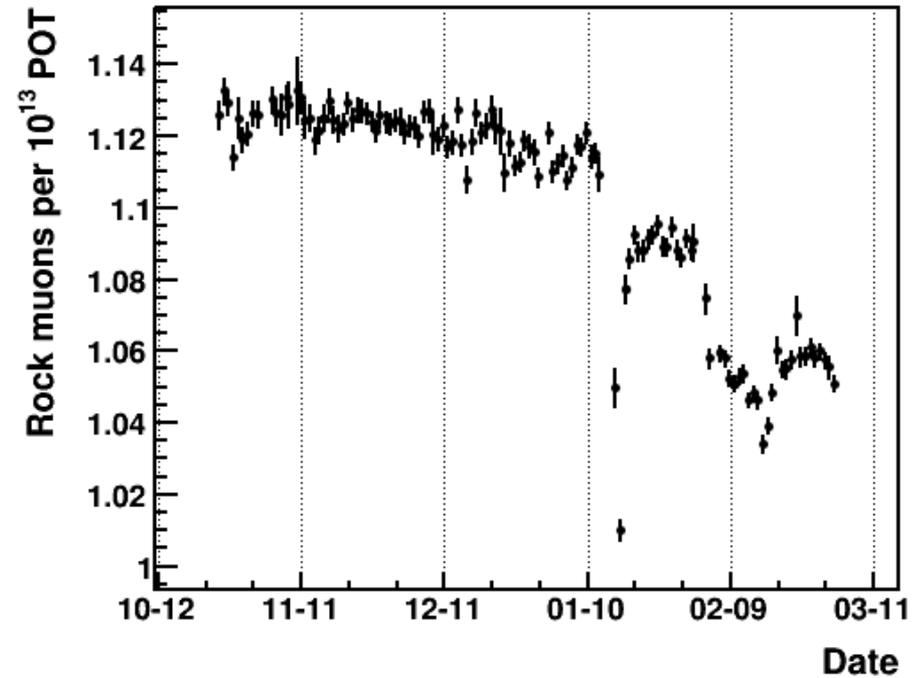
- We had a watchdog failure last Thursday which affected the livetime for a day which we will report next week. It will be discussed in more detail next week.



# Rock Muons/POT



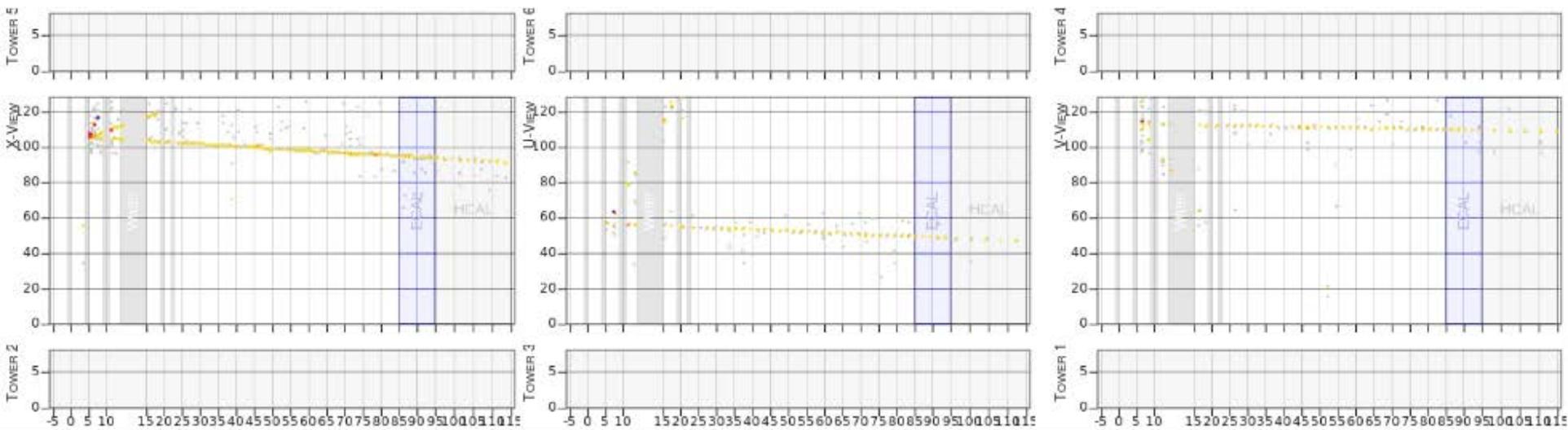
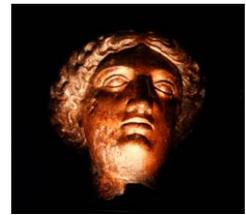
POT/Pulse



Rock Muons/POT



# Event Display



X View

V View

U View

Nuclear Target CCQE Event



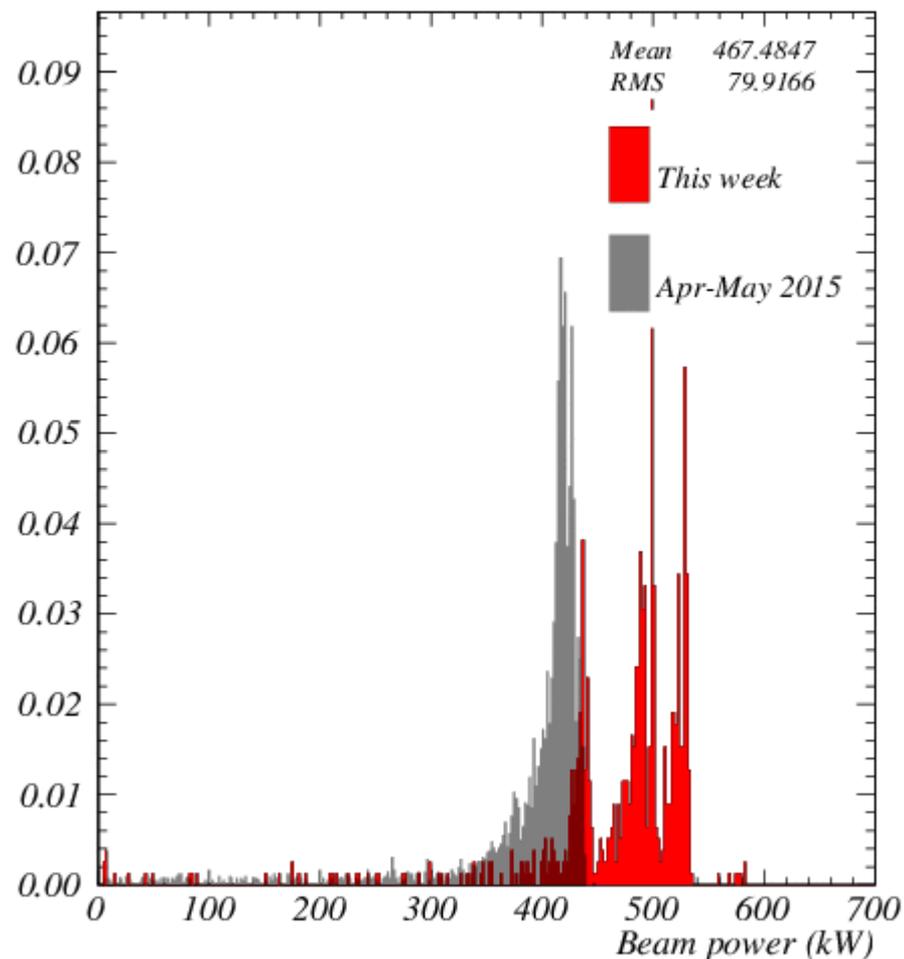
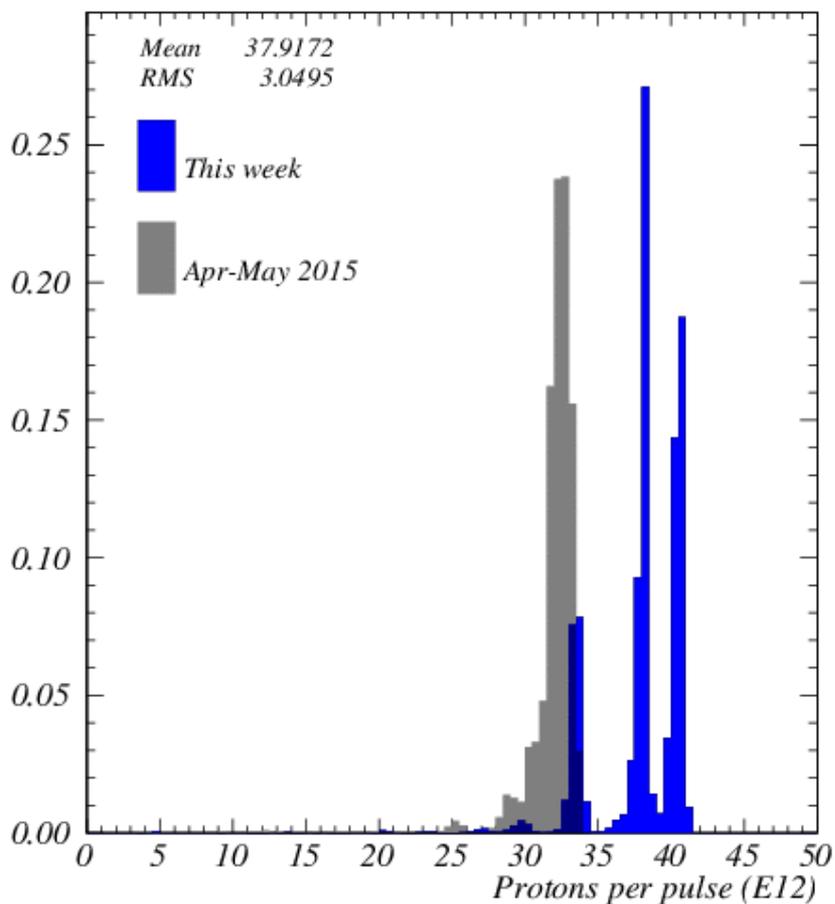
# NuMI Beam Plots

## Feb 29-Mar 6, 2016



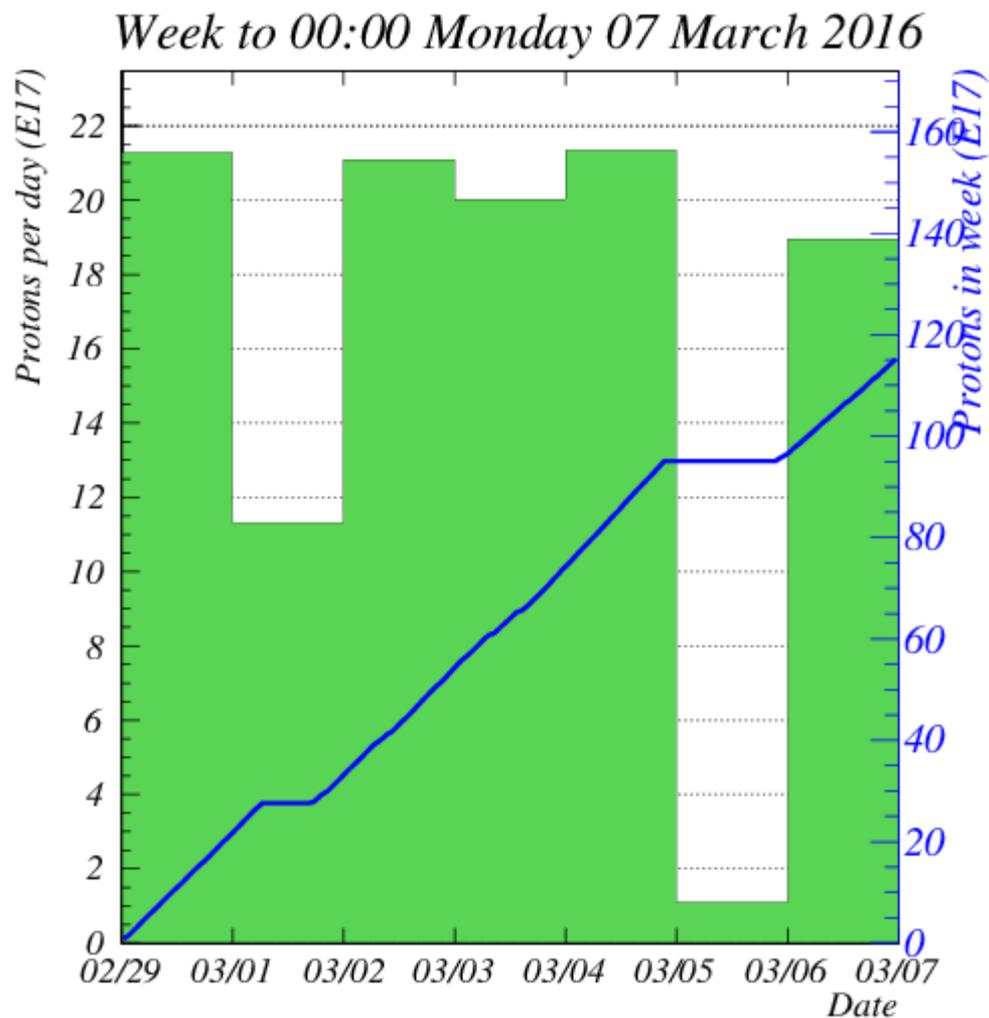
Week ending 00:00 Monday 07 March 2016

Week ending 00:00 Monday 07 March 2016





# Protons for the Week



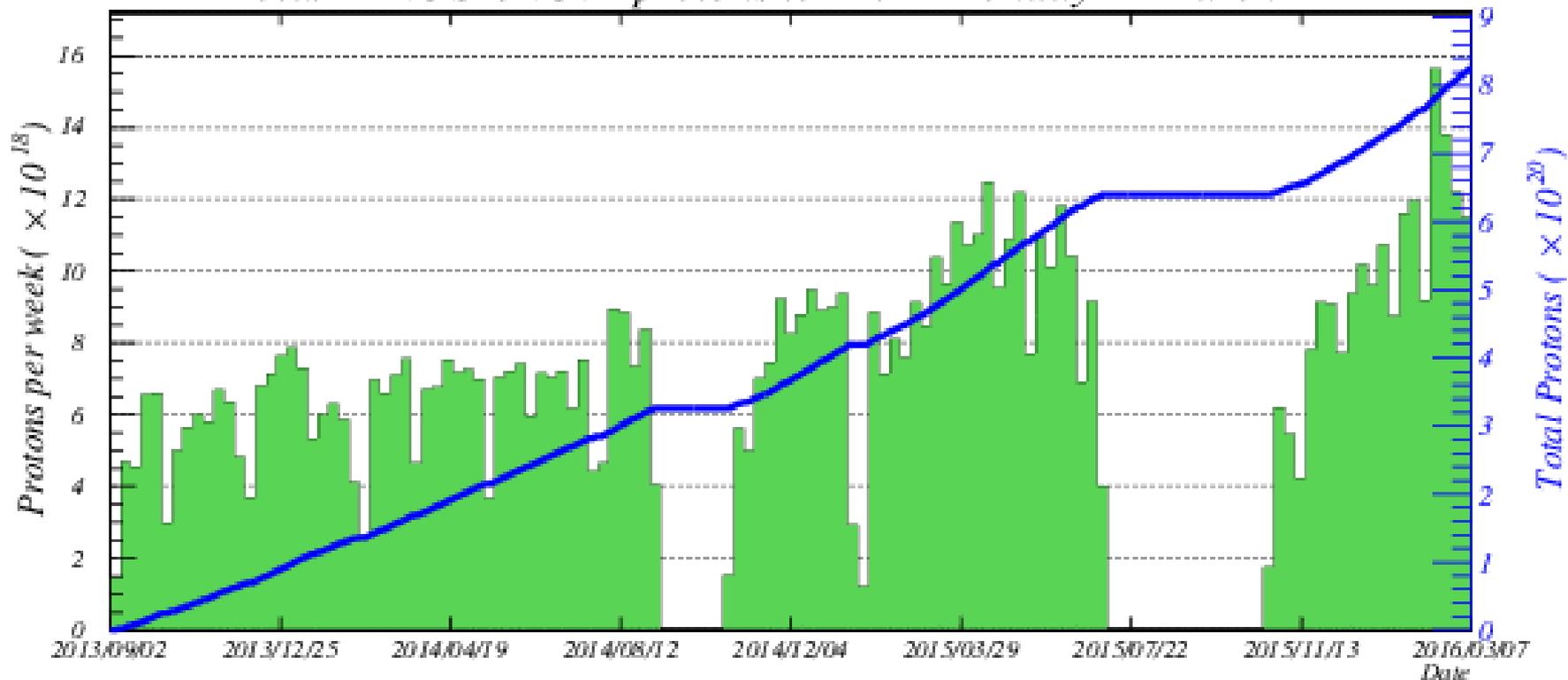
$1.15 \times 10^{19}$  POT  
Feb 29-Mar 6, 2016



# Protons for ME Run



Total MINOS+/NOvA protons to 00:00 Monday 07 March 2016



**$82.45 \times 10^{19}$  POT - Sep 6, 2013 – Mar 6, 2016**